CLAIMS

1/ A method of detecting a deposit (D) that might form inside a fluid transport pipe (2), the method being characterized in that it consists:

· in applying a thermal gradient (G) to at least one "active" zone (Za) of the outside surface of the pipe;

· in measuring the heat flux (F) in at least one zone (Zm) of the outside surface of the pipe that is situated at a given distance from the active zone in consideration of the length of the pipe; and

· in detecting when the heat flux corresponding at least in part to the applied thermal gradient and transmitted by the pipe exceeds a determined threshold indicative of the presence of a deposit inside the pipe.

2/ A method according to claim 1, characterized in that it consists in applying a thermal gradient (G) in a determined cycle.

3/ A method according to claim 1 or claim 2, characterized in that it consists in applying a thermal gradient (G) in an active zone (Za) constituting a circumference of the pipe.

4/ A method according to any one of claims 1 to 3, characterized in that it consists in applying a thermal gradient (G) via a heat production source (3) fitted to or integrated in the pipe.

5/ A method according to claim 1, characterized in that it consists in measuring the heat flux (F) at one or more sectors of a circumference of the pipe.

6/ A method according to claim 1 or claim 5, characterized in that it consists in measuring the heat flux (F) by means of a heat flux sensor (7) fitted to or integrated in the pipe.

7/ A method according to claim 1, characterized in that it consists in determining the thickness of the deposit (D) by comparing the measured heat flux with the heat flux measured during a calibration stage.

8/ An installation for implementing a method according to claim 1, in order to detect a deposit (D) that might form inside a fluid transport pipe (2), the installation being characterized in that it comprises:

· at least one production source (3) for producing a thermal gradient (G), the source being for mounting on an "active" zone (Za) of the outside surface of the pipe;

· at least one measurement sensor (7) for measuring heat flux (F), the sensor being for mounting on a zone (Zm) of the outside surface of the pipe situated relative to the active zone at a given distance in consideration of the length of the pipe; and

· control and monitoring means (5) connected to the production source (3) and to the measurement sensor (7), and adapted to detect when the heat flux corresponding at least in part to the applied thermal gradient and transmitted by the pipe exceeds a determined threshold indicative of the presence of a deposit inside the pipe.

9/ An installation according to claim 8, characterized in that the monitoring means (5) comprise means for determining the thickness of the deposit by comparing the measured heat flux

and the heat flux measured during a calibration stage.

10/ An installation according to claim 8 or claim 9, characterized in that the control and monitoring means (5) comprise means for detecting the peak values of the measured heat flux signal so that the peak-to-peak value of the signal can be compared with the threshold value indicating the presence of a deposit inside the pipe.

11/ An installation according to claim 8, characterized in that the production source (3) for producing a heat gradient is constituted in the form of a flexible band fitted to or integrated in the pipe.

12/ An installation according to claim 8, characterized in that the measurement sensor for measuring heat flux (7) is formed by a flexible band equipped with one or more flux meters and fitted to or integrated in the pipe.